

KULIYEV, A.M.; MUSAYEVA, N.F.; MAMEDOV, F.N.

Condensation of alkyl phenols with formaldehyde and
secondary amines. Azerb. khim. zhur. no.1:43-47 '64.
(MIRA 17:5)

KULIYEV, A.M.; MAMADOV, F.A.; MAMADOV, F.H.

Synthesis of trialkylphenyl trithiophosphites. Azerb. khim.
zhur. no.3:55-57 '64. (MIRA 18:5)

KULIYEV, A.M.; MAMEDOV, O.A.

Calculating the inflow of thinned oil to a well in nonuniform
layers. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk no.4:75-82 '64.
(MIRA 17:12)

KULIYEV, A.M.; BATYROV, M.; MAMEDOV, F.N.

Synthesis of alkylarylmecaptoncetic acids. Azerb. khim. zhur.
no.5:15-17 '64. (MIRA 18:3)

KULIYEV, A.I.M.; AGAKISHIYEV, N.A.; PINSKER, B.A.

Temperature effect on the adsorption capacity of highly active
coals and silica gel. Azerb. khim.zhur. no.4:33-36 '64.
(MIRA 18:3)

KULIYEV, A.M.; AGAKISHIYEV, N.A.; PINSKER, B.A.

Description of casing head gasoline from the surface of adsorbents
under increased pressure. Gaz. prom. 9 no.4:48-51 '64.
(MIRA 17:8)

KULIYEV, A.M.; ALEKPEV, G.Z.; PINSKER, B.A.; GRIGORYAN, E.V.; BROVCHENKO, T.P.

Separation of natural gas in a consolidated laboratory set-up.
Gaz. prom. 9 no.1:51-54 '64. (MIRA 17:12)

KULIYEV, A.M.; SULEYMANOVA, F.G.; SADYKHOV, K.I.; ZEYNALOVA, G.A.; EL'OVICH,
I.I.; KHIGER, V.F.; BASHAYEV, V. Ye.; MUSHAILOV, A. Ye.

Improving the quality of motor oils from Baku petroleum. Khim.
i tekhn. topl. i masel 9 no.6:35-39 Je'64 (MIRA 17:7)

1. Institut neftekhimicheskikh protsessov AN Azer-SSR.

L 14037-66 EWP(J)/EWT(m)/T RM/DJ

ACC NR: AR5020047 SOURCE CODE: UR/0081/65/000/012/K017/K017

AUTHOR: Auliyev, A.M.; Liksha, V.B.; Suleymanova, F.G.

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B

ORG: none

15,44,55

11,44

TITLE: Laboratories studies of the anticorrosive effect of additives to lubricants

SOURCE: Ref. zh. Khimiya, Abs. 12K92

REF SOURCE: Azerb. neft. kh-vo, no. 10, 1964, 38-40

TOPIC TAGS: corrosion, lubricant, anticorrosion additive

TRANSLATION: It is shown that an increased concentration of oils in alkyl-phenolic additives (BFK and AzNII-7) gradually decreases the corrosion of Pb. The antioxidation additive DF-11 and antibrasion additive LV-25K contained in oils on the order of 1% possess high anticorrosive properties and sharply decrease the corrosion of Pb. It is confirmed that the sulphonated additive SB-3 mixed with certain basic oils somewhat increases the corrosive aggression during prolonged oxidation. From the authors' resume.

SUB CODE: 07

Card 1/1 20

KULIYEV, A.M.; ZUL'FUGAROVA, A.G.

Synthesis and study of alkyl m-dioxanes. Dokl. AN Azerb. SSR 20
no.4:29-31 '64. (MIRA 17:7)

1. Institut neftekhimicheskikh professov AN Azerbaydzhanskoy SSR.

KULIYEV, A.M.; ZUL'FUGAROVA, A.G.; EL'OVICH, I.I.

Synthesis and study of antiwear additives based on the products of condensation of alkylbenzenes with chloral. Dokl. AN Azerb. SSR 21 no.5:20-24 '65. (MIRA 18:9)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

KULIYEV, A.M.; KULIYEV, A.B.; MAMEDOV, F.N.

Synthesis of alkyl thiophenols. Zhur. ob. khim. 34 no. 3:
993-995 Mr '64. (MIRA 17:6)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

KULIYEV, A.M.; KULIYEV, A.B.

Condensation of alkylthiophenols with chloral. Azerb. khim. zhur. no.1;
28-30 '65. (MIRA 18:7)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

ABDULLAYEV, A.S.; KULIYEV, A.M.

Investigating the flow of gas-but oil in case of high oil saturation.
Izv. AN Azerb. SSR. Ser.fiz.-tekh. i mat. nauk no.3:207-211 '65.
(MIRA 2:286)

KULIYEV, A.L.M.; TABATABAI, A.M.; ALEKPEROV, G.Z.; ISMAYLOV, A.G.; SARKISOVA, L.G.

Separation of natural gas in a "fluidized" bed of adsorbent under pressure. Dokl. AN Azerb. SSR 21 no.4:17-21 '65.

(MIRA 18:7)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

L 1792-66 EWT(m)/EWP(w)/EPF(c)/T/EWP(t)/EWP(b) JD/WB/DJ/RM
ACCESSION NR: AP5024480 UR/0316/65/000/003/0026/0032

AUTHOR: Kuliyev, A. M.; Zul'fugarova, A. G.; El'ovic, I. I.

TITLE: Synthesis and study of the anti-wear properties of additives from condensation products of alkylphenols with chloral

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 3, 1965, 26-32

TOPIC TAGS: lubricant additive, antiwear additive, anticorrosion additive

ABSTRACT: Seven anti-corrosion and anti-wear additives have been prepared by the condensation of various alkylphenols with chloral and, in some cases, subsequent treatment with phosphorus pentasulfide. The phenols used were isopropyl-, p-tert-butyl-, and p-tert-pentylphenols, and a technical alkylphenol. Condensation with chloral was carried out with stoichiometric amounts of the reactants in isooctane solution at 80-85C in the presence of concd H₂SO₄. The condensation products were treated with P₂S₅ in dearomatized ligroin at 95-100C:

Card 1/2

L 1792-66

ACCESSION NR: AP5024480

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For both reactions yields ranged from 66 to 96%; product melting points from 42 to 162C. The products were tested as anti-wear and anti-corrosion additives (3%) in AK-5 oil. Wear tests employed a four-ball apparatus, and anti-corrosion tests involved the [Soviet] NAMI method and a Swiss method (Reference given). All the products showed good anti-corrosion and anti-wear properties. The condensation products increased the anti-wear factor from 23 to 56.2 max and the dithiophosphates increased it from 23 to 102.5 max. Corrosion of lead strips (NAMI method) was fully prevented. Orig. art. has: 2 formulas and 4 tables. [SM]

ASSOCIATION: INKhP AN Azerb SSR 44.55

SUBMITTED: 21Jan65

ENCL: 00

SUB CODE: FP, 07

NO REF SOV: 003

OTHER: 001

ATD PRESS: 4112

Card 2/2

KULIYEV, A.M.; ALEKPEROV, G.Z.

Adsorption processes for the separation of natural and casinghead gases. Gaz.prom. 10 no.2:36-38 '65.

(MIRA 18:12)

ABBASOV, M.T.; KULIYEV, A.M.; MAMEDOV, O.A.; YUSIFOV, Yu.B.

Determining average oil saturation in the flow of solution-
gas expansion. Izv. AN Azerb. SSR. Ser. geol.-geog. nauk
no.3:78-84 '65. (MIRA 18:9)

KULIYEV, A.I.M.; GRIGORYAN, E.V.

Mechanical strength of silica gels. Azerb. khim. zhur. no.3:
92-95 '65. (MIRA 19:1)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

KULIYEV, A.M.; SARDAROVA, S.A.

Synthesis of some S-substituted thiotetralol derivatives.
Azerb.khim.zhur. no.4:10-13 '65.

(MIRA 18:12)

1. Institut neftekhimicheskikh protsessov AN AzSSR. Submitted
February 3, 1965.

L 14547-66 EWT(m)/EWP(j)/T DJ/RM

ACC NR: AP6005104

SOURCE CODE: UR/0316/65/000/005/0003/0005

AUTHOR: Kuliyev, A. M.; Mamedov, F. A.; Mamedov, F. N.

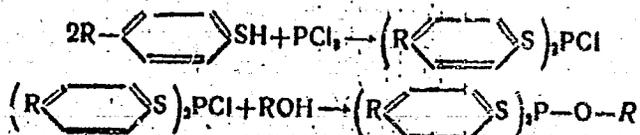
ORG: INKhP AN AzerSSR

TITLE: Synthesis of mixed thiophosphite esters 11.11.56

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 5, 1965, 3-5

TOPIC TAGS: ester, phosphite, additive, lubricant

ABSTRACT: Phosphite esters are of considerable interest as lubricant additives and polymer stabilizers. In this work mixed esters were obtained from alkythiophenols, aliphatic alcohols and phosphorus trichloride. The preparation was conducted in two stages: 1) The preparation of alkylphenyl dithiophosphite acid chloride; and 2) treatment of the acid chloride with an aliphatic alcohol:



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L 14547-66

ACC NR: AP6005104

The following mixed phosphite esters were obtained in 96—98% yield:

Table 1. Mixed thiophosphite esters

Formula	n _P	Mol. wt.		Composition							
		Found	Calcd	Found				Calculated			
				C	H	S	P	C	H	S	P
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₅	1,5944	409,1	406,6	65,68	7,75	16,36	7,21	64,99	7,68	15,17	7,62
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₅ iso	1,5917	423,4	420,6	65,94	7,80	15,25	6,87	65,68	7,90	15,24	7,36
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₅ n	1,5803	433,9	434,7	66,21	8,60	15,23	7,40	66,32	8,11	14,75	7,12
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₁₁ iso	1,5948	456,7	448,7	67,03	8,14	14,61	6,78	66,23	8,32	14,27	6,90
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₁₁ n	1,5760	458,9	448,7	67,35	8,60	13,96	7,07	66,93	8,32	14,27	6,90
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₁₃ iso	1,5738	465,1	452,7	67,02	8,83	14,48	6,47	67,49	8,49	13,90	6,69
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₁₃ n	1,5667	471,3	476,8	68,29	8,99	13,66	6,77	68,02	8,67	13,45	6,48
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₁₁ n	1,5647	488,5	490,8	68,68	9,12	13,12	6,43	68,53	8,83	13,07	6,31
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₁₃ n	1,5634	512,1	504,8	69,52	9,20	13,38	6,38	69,00	8,99	12,70	6,13
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₂₁ n	1,5589	528,3	518,8	69,18	9,66	12,20	5,71	69,45	9,13	12,36	5,97
sec (Br. C ₂ H ₅ -C ₂ H ₅ -S) ₂ P-O-C ₂ H ₁₁	1,5896	465,1	460,7	67,45	8,27	13,98	6,85	67,78	8,09	13,58	6,72

Orig. art. has: 1 formula and 1 table.

[VS]

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L 14547-56

ACC NR: AP6005104

SUB CODE: 11, *07* / SUBM DATE: 18Jun65 / ORIG REF: 009 / OTH REF: 005 / ATD PRESS:

4197

OC
Card 3/3

L 1860-66 EWT(m)/EPF(c)/EWP(j)/T DJ/RM

ACCESSION NR: AP5025347

UR/0366/65/001/010/1787/1789
547.569.1

AUTHOR: Kuliye^{44.55}v, A. M.; Kuliye^{44.55}v, A. B.; Mamedov, F. N. ^{44.55}

TITLE: Synthesis of alkylthiophenols || ^{44.55}

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 10, 1965, 1787-1789

TOPIC TAGS: thiophenol, lubricant additive ||

ABSTRACT: P-n-propyl-, p-isobutyl-, p-n-amyl-, p-n-hexyl-, p-n-heptyl-, p-n-octyl-, p-n-nonyl-, and p-n-decylthiophenols were prepared by zinc/hydrochloric acid reduction of the corresponding alkylbenzenesulfonyl chlorides. Monoalkylbenzenes were prepared by the reaction of the appropriate alkyl bromide, bromobenzene, and sodium. The monoalkylbenzenes were then chlorosulfonated with chlorosulfonic acid. Oxidation products and derivatives of the thiophenols show that chlorosulfonation occurs in the para position. The physical constants of the thiophenols are given in tabular form. Orig. art. has: 1 table. [VS]

ASSOCIATION: Institut neftekhimicheskikh protsessov Akademii nauk Azerbaydzhansko^{44.55}y SSR (Institute Petrochemical Processes, Academy of Sciences, Azerbaiddzhan SSR)

Card 1/2

L 1860-66

ACCESSION NR: AP5025347

SUBMITTED: 23Nov64

ENCL: 00

SUB CODE: 00, ⁰GC

NO REF SOV: 003

OTHER: 001

ATD PRESS: 4/12

Card ^{dg} 2/2

L 1897-66

ACCESSION NR: AP5021584

UR/0286/65/000/013/0055/0055

665.4/5

AUTHOR: Kuliyev, A. M. o.; Suleymanova, F. G.; El'ovich, I. I.; Zeynalova, G. A. k.;
Mushallov, A. Ye.

TITLE: Preparative method for motor oils. Class 23, No! 172446

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 55

TOPIC TAGS: lubricating oil, lubricant additive, antiwear additive

ABSTRACT: An Author Certificate has been issued for a preparative method for motor oils, involving addition of the following additives to an oil base: an alkylphenol-formaldehyde condensation product [unspecified], and sulfonate, antiwear, and de-foamant additives. To improve the service properties of the oil, the antiwear additive used is thiochlorostyrehe [sic]. [SM]

ASSOCIATION: Institut neftekhimicheskikh protsessov im. Yu. G. Mamedaliyeva
AN Azerbaydzhanskoy SSR (Institute of Petrochemical Processes, AN Azerbaydzhan SSR)

SUBMITTED: 03Mar64

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: FP

ATD PRESS: 4088

Card 1/1 *mlb*

L 1631-66 EWT(m)/EPF(c)/ENP(j)/T EW/WW/DJ/RM

ACCESSION NR: AP5022083

UR/0249/65/021/005/0020/0024

AUTHORS: Kuli'yev, A. M.⁴⁴; Zul'fugarova, A. G.⁴⁴; El'ovich, I. I.⁴⁴ 3/33

TITLE: Synthesis and investigation of antiwear additives from the products of alkylbenzenes-chloral condensation

SOURCE: AN AzerbSSR. Doklady, v. 21, no. 5, 1965, 20-24

TOPIC TAGS: alkyl benzene, antiwear additive, condensation reaction

ABSTRACT: Ten new compounds, synthesized by acid condensation of chloral with various alkylbenzenes, were tested for their antiwear and anticorrosive properties as lubricant additives. The work was undertaken in view of the observations of P. I. Sanin and Ye. S. Shepeleva (Prisadki k maslam i toplivam. Gostoptekhizdat, 1961, p. 61) that the antiwearing properties of many other organic compounds can be related to their content of CCl_3 group. The reaction was performed at 50-60C for 5-6 hours in the presence of concentrated H_2SO_4 (40% by weight of alkylbenzene). The white crystalline products were recrystallized from heptane. Physical properties, yields, and elementary analyses of the following compounds are presented:

Card 1/2 1,1,1-Trichloro-2,2'-bis-diphenylethane;
1,1,1-Trichloro-2,2'-bis-(1-methylphenyl)ethane;

L 1631-66

ACCESSION NR: AP5022083

1,1,1-Trichloro-2,2'-bis-(1,2-dimethylphenyl)ethane;
1,1,1-Trichloro-2,2'-bis-(1,3-dimethylphenyl)ethane;
1,1,1-Trichloro-2,2'-bis-(1,4-dimethylphenyl)ethane;
1,1,1-Trichloro-2,2'-bis-(1-ethylphenyl)ethane;
1,1,1-Trichloro-2,2'-bis-(1-isopropylphenyl)ethane;
1,1,1-Trichloro-2,2'-bis-(1-tert.butylphenyl)ethane;
1,1,1-Trichloro-2,2'-bis-(1-sec.amylphenyl)ethane;
Condensation product of polyalkylbenzene with chloral.

The anti-wear properties of the compounds did not differ from each other to any extent but an addition of 3% of either of them to the lubricant MK-22 increased its general wear index 3 to 3.5 times. A Swiss test of the anticorrosive properties indicated that an addition of 3% of either compound to the lubricant AK-15 contains corrosion of steel plates within normal limits. Orig. art. has: 4 tables and 1 equation.

ASSOCIATION: NIKhP 44

SUBMITTED: 30Jun64

ENCL: 00

SUB CODE: 00

NO REF SOV: 004

OTHER: 001

Cord 2/2

L 17698-66 EWT(m)/T DJ

ACC NR: AP6007671

(A)

SOURCE CODE: UR/0413/66/000/003/0043/0043

INVENTOR: Kuliyev, A. M.; Zeynalova, G. A. K.; Suleymanova, F. G.; Kerimova, E. B.-A. K.; Agakishiyeva, A. M.-A. K.; Khiger, V. F.

ORG: none

TITLE: Preparative method for a multipurpose additive to motor oils. Class 23, No. 178437 [announced by Institute of Petrochemical Processes, AN Azerbaydzhansky SSR (Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 43

TOPIC TAGS: lubricant additive, lubricating oil

ABSTRACT: An Author Certificate has been issued for a preparative method for an improved multipurpose additive to motor oils. The method involves treatment with phosphorus pentoxide of an alkylphenol-formaldehyde-ammonia condensation product.

[B0]

SUB CODE: 21/ SUBM DATE: 27Oct64/ ATD PRESS: 4210

Card 1/1

UDC: 621.892.86:546.185

L 22688-66 EWT(m)/EWP(j)/T DJ/EM

ACC NR: AP6006933

(N)

SOURCE CODE: UR/0316/65/000/006/0010/0013

AUTHOR: Kuliyev, A. M.; Alizade, Z. A.; Aliyev, A. B.

47
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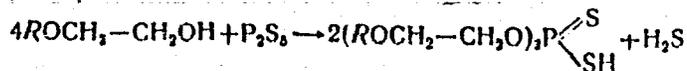
ORG: Institute of Chemistry of Additives, AN AzerbSSR (Institut khimii prisadok AN AzerbSSR)

TITLE: Reaction of ethylene glycol monoalkyl ethers with phosphorus pentasulfide

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 6, 1965, 10-13

TOPIC TAGS: ether, phosphorus sulfide, phosphorus compound, antioxidant additive

ABSTRACT: The authors studied the reactions of ethylene glycol monoalkyl ethers with phosphorus pentasulfide in order to develop new antioxidant additives for lubricating oils. The overall equation for these reactions is



The following compounds were thus prepared: 0.0-di(β-methoxyethyl)dithiophosphate,

Card 1/2

2

L 22688-66

ACC NR: AP6006933

0,0-di(β -ethoxyethyl)dithiophosphate, 0,0-di(β -propoxyethyl)dithiophosphate, 0,0-di(β -butoxyethyl)dithiophosphate, and 0,0-di(β -pentoxyethyl)dithiophosphate. The structure of these compounds was identified by converting these compounds to their ammonium salts and analyzing the latter. The physicochemical constants of both groups of compounds are tabulated. Orig. art. has: 2 tables.

SUB CODE: 07/

SUBM DATE: 02Jun65/

ORIG REF: 004/

OTH REF: 000

Card 2/2

L 22721-66 EMT(m)/T/EWP(t) LIP(s) JD/WR/DI
 ACC NR: AF6002932 (A) SOURCE CODE: UR/0286/65/000/024/0101/0101

AUTHORS: Kuliyeu, A. M.; Sulaymanova, F. G.; Liksha, V. B.; Gurylov, G. G. L19
B

ORG: none

TITLE: A device for determining corrosivity of oils and the anticorrosion efficiency of additives in them. Class 42, No. 177157 [announced by Institute of Petroleum-Chemistry Processes im. Yu. G. Mamedaliyev, AN Azerbaydzhan SSR (Institut neftkhimicheskikh protsessov AN Azerbaydzhanskoy SSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 101

TOPIC TAGS: corrosion rate, corrosion inhibitor, lubricating oil, anticorrosion additive, corrosion resistant metal

ABSTRACT: This Author Certificate presents a device for determining the corrosivity of oils and the anticorrosion effectiveness of additives. The device consists of a thermostat, a chamber filled with the test oil, an arrangement for supplying air, and a wire resistance-indicator. For increasing precision of measurements, the resistance gauge is made in the form of bimetallic wire, an outer surface of the test metal over a core of metal not subject to corrosive decay in the test medium and having high electrical resistance. For regulated and uniform supply of air in the chamber, the chamber is attached to a disk that produces reciprocating

Card 1/2

UDC: 620.193.471.2 2

L 22721-66

ACC NR: AP6002932

motion. It is equipped with a fixed piston that permits air to pass but not oil. This piston has a shaft with a  circuit for admitting the air and a valve for turning off the supply.

SUB CODE: 14, 13/ SUBM DATE: 22Apr64

Card 2/2

L 11574-66 ENT(m)/r DJ

ACC NR: AP6005336

SOURCE CODE: UR/0413/66/000/001/0074/0074

INVENTOR: Papok, K. K.; Kreyn, S. E.; Vipper, A. B.; Zuseva, B. S.; Garzanov, G. Ye.
Vinner, G. G.; Dobkin, I. Ye.; Afanas'yev, I. D.; Rogachevskaya, T. A.; Somov, V. A.;
Botkin, P. P.; Kuliyeu, A. M.; Zeynalova, G. A.

ORG: none

TITLE: Preparation of motor oil. Class 23, No. 177579

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 74

TOPIC TAGS: motor oil, antiwear additive, detergent additive

ABSTRACT: An Author Certificate has been issued for a preparative method for motor oil, involving addition of a detergent and an antiwear additive to the oil base. The method provides for the use of an alkyl-formaldehyde condensation product and of a dialkyl dithiophosphate based on C₁₂-C₁₆ alcohols as the additives. [80]

SUB CODE: 11/ SUBM DATE: 16Apr64/ ATD PRESS: 4/90

Card

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1/1

UDC: 621.892.8

L 32946-66 EWT(m)/EWP(j)/T/EWP(t)/ETI IJP(c) RM/JW/WE/JD
ACC NR: AP6015898 (A) SOURCE CODE: UR/0249/65/021/009/0016/0019

AUTHOR: Kuliyev, A. M.; Tabatabai, A. M.; Alekperov, G. Z.; Ibragimov, M. H.

ORG: INKhP im. Yu. G. Mamedaliyev

TITLE: Topping of natural gas under pressure

SOURCE: AN AzerbSSR. Doklady, v. 21, no. 9, 1965, 16-19

TOPIC TAGS: degassing, butane, gasoline, natural gas

ABSTRACT: Natural gas containing 11.5 g gasoline per m³ was topped continuously by a countercurrent fluidized layer of activated carbon (0.5-1.5 mm) in a column at 5 atm. The gas was fed into the bottom of the column (250-320°C) at a rate of 25 m³/hr; gas flow in the column was 0.1 m/sec and carbon circulation was 100 kg/hr. At a carbon/gas ratio of 4.0 kg/m³, extraction of gasoline was 100% and that of butane was 90%. By raising the ratio to 6.0 kg/m³, butane extraction reached 100%. Enrichment of gas to a gasoline content of 45 gm/m³ did not impair efficiency of extraction. Presented by M. G. Nagiyev, Academician of the AN Azerbaydzhn SSR. Orig. art. has: 4 tables.

SUB CODE: 13,21/ SUBM DATE: 02Mar64/ ORIG REF: 001

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B

Card 1/1

L 31550-00 EWT(m)/EWP(j) RM

ACC NR: AP6005107

(A)

SOURCE CODE: UR/0316/65/000/005/0023/0026

AUTHOR: Kuliyev, A. M.; Alizade, Z. A.

ORG: INKhP AN Azorb. SSR

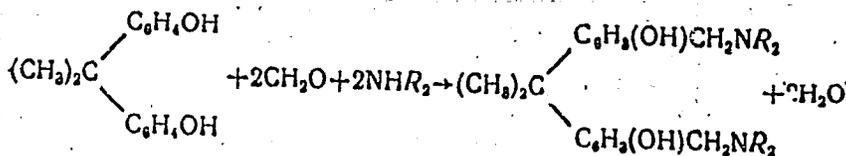
40
B

TITLE: Antioxidant additives from products of the reaction of bis-phenol with formaldehyde and secondary amines

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 5, 1965, 23-26

TOPIC TAGS: antioxidant additive, secondary amine, formaldehyde, propane, condensation reaction, acetic anhydride, nonmetallic organic derivative

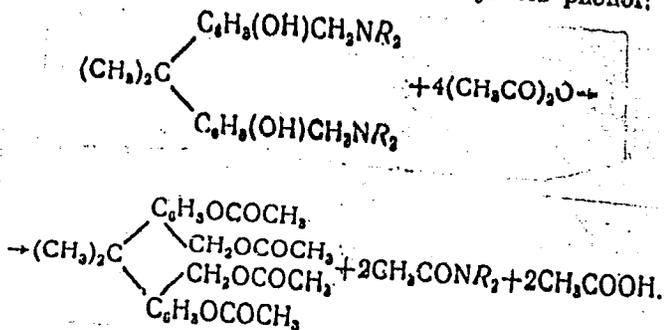
ABSTRACT: The condensation reaction of bis-phenol (4,4-dihydroxy-2,2-diphenylpropane) with secondary amines and formaldehyde was studied. The secondary amines employed were dimethyl-, diethyl-, and diphenylamine. It was found that the joint condensation of bis-phenol with the secondary amines and formaldehyde produces bis(dialkylaminomethyl)- and bis(diarylaminomethyl)-bis-phenols:



L 31550-66

ACC NR: AP6005107

To determine the structure of the compounds obtained, their reactions with acetic anhydride were investigated. It was thus found that in all the experiments, the acetylation reaction gives rise to tetraacetyl derivatives of dihydroxymethyl-bis-phenol:



Also formed is the acetate of the initial aminomethyl derivative of bis-phenol. The addition of bis(dimethylaminomethyl)-bis-phenol to D-11 diesel oil was found to increase the oxidation resistance of the latter considerably more than the addition of bis(diethylaminomethyl)-bis-phenol, the optimum concentration of the additive being 0.2%. Orig. art. has: 3 tables.

SUB CODE: 07 / SUBM DATE: 02Jul65 / ORIG REF: none / OTH REF: 001

Card. 2/2 LC

L 32720-66 EMP(j)/EWT(m) RM/JW

ACC NR: AP6021425

SOURCE CODE: UR/0413/66/000/011/0023/0023

INVENTOR: Kuliyev, A. M.; Mamedov, F. N.; Mamedov, F. A.

23
B

ORG: none

TITLE: Preparative method for a multipurpose additive. Class 12, No. 182168
[announced by Institute of Petrochemical Processes, AN AzerSSR (Institut
neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 23

TOPIC TAGS: multipurpose additive, hydroxydiphenylamine, formaldehyde, diethylamine

ABSTRACT: An Author Certificate has been issued for a preparative method of a
multipurpose additive involving condensation of p-hydroxydiphenylamine with formal-
dehyde and diethylamine. [BO]

SUB CODE: 11/ SUBM DATE: 18Feb65/ ATD PRESS: 5025

Card 1/1 JS

UDC: 542.953:621.892.8

L 30529-00 EN (R)/T DJ

ACC NR: AR60L4585 (A)

SOURCE CODE: UR/0081/65/000/021/S043/S043

AUTHORS: Kuliyev, A. M.; Levshina, A. M.; Sadykhov, Z. A.; Vedoneyova, L. Ya. 35TITLE: Investigation of the synthesis of viscosity additives from oleic esters 34

SOURCE: Ref. zh. Khimiya, Abs. 21S264 3

REF SOURCE: Uch. zap. Azerb. un-t. Ser. khim. n., no. 3, 1964, 79-83

TOPIC TAGS: organic synthetic process, viscosity additive, catalytic polymerization, depolymerization, condensation reaction, oleic acid, ethylene glycol, lubricating oil / MK-8 lubricating oil, AzNII-8 viscosity additive

ABSTRACT: Polyesters (PE) were synthesized from ethylene glycol and methyl oleate dimer (D), and the products were tested as additives for lubricating oils, increasing the latter's viscosity. D was prepared by heating methyl oleate for 10-15 hours at 300C in the presence of 0.1-0.3% of anthraquinone. D was distilled at 178-180C/1-1.2 mm Hg. Molecular weight of D approximated the calculated one, acid number 12-25 mg KOH. Yield of D was 20-30%, based on the original ester. Condensation of D with 10% ethylene glycol was conducted in an N₂ atmosphere first at 120-130C, then at 200-225C for 40-45 hours in the presence of 0.1-1.5% (with respect to D) of p-toluene-sulfonic acid. The yield of the condensation product is 100% based on D, molecular weight 1000-3000 (determined cryoscopically in benzene). Addition of 10% of PE to oil MK-8 increased the latter's viscosity from 2.76 to

Card 1/2

3 39519-06

ACC NR: AR6014585

3.7--5.3 centistokes at 100C, the viscosity index from 60 to 114--158.5. Heating of PE in oil for 12 hours at 200C lowers the viscosity index by 9--12%. High molecular weight PE depolymerizes to a greater degree. Depolymerization of PE in oil is decreased upon addition of 3% of AzNii-8 additives. Ye. Zambrovskaya [Translation of abstract]

SUB CODE: 11 07

L 44315-66 ENT(m)/T DJ

ACC NR: AP6029041 (A) SOURCE CODE: UR/0413/66/000/014/0056/0056

INVENTOR: Kuliyev, A. M.; Ali-Zade, Z. A.; El'ovich, I. I. 37
B

ORG: none

TITLE: Preparative method for an antiwear additive to lubricating oils. // 2
Class 23, No. 183865 [announced by Institute of Petrochemical Processes,
AN AzerbSSR (Institut neftekhimicheskikh protsessov AN AzerbSSR)]

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 56

TOPIC TAGS: antiwear additive, lubricant additive, *lubricating oil*

ABSTRACT: An Author Certificate has been issued for a preparative method for an antiwear additive for lubricating oils. The method involves treatment of naphthenic acids [unspecified] with epichlorhydrin and phosphorus pentasulfide, followed by "nitrolization" [sic] of the reaction product. [SM]

SUB CODE: 11/ SUBM DATE: 13Mar65/

Card 1/1 blr

UDC: 621.892.84

L 20632-66 EWT(m)/T DJ

ACC NR: AP6011220

(A)

SOURCE CODE: UR/0413/66/000/006/0057/0057

INVENTOR: Blagovidov, I. F.; Druzhinina, A. V.; Monastyrskiy, V. N.; Puchkov, N. G.;
Deryabin, A. A.; Borovaya, M. S.; Filippov, V. F.; Avallani, T. K.; Zaslavskiy, Yu. S.;
Tarmanyan, G. S.; Shor, G. I.; Dmitriyeva, N. A.; Belyanchikov, G. P.; Kuliyeu, A. M.;
Suleymanova, F. G.; Zaynalova, G. A.; Sadykhov, K. I.

ORG: none

TITLE: Preparative method for motor oils. Class 23, No. 179868

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 57

TOPIC TAGS: lubricating oil, lubricant additive

ABSTRACT: An Author Certificate has been issued for a preparative method for motor oils, involving the introduction of additives. To impart the required service properties, the additives used are an alkylphenol-formaldehyde condensation product (3-15%), a sulfonate additive (2-6%), an additive based on xanthates or dithio-phosphates (0.5-1%), and an organosilicon additive (0.003-0.005%) [the additives are no further identified in the source].

SUB CODE: 11/ SUBM DATE: 02Aug62/ ATD PRESS: 4225 [SM]

Card 1/1

UDC: 665.521.5002.237

L 43822-66 ENT(m)/T DJ

ACC NR: AP6030591 (A,N)

SOURCE CODE: UR/0413/66/000/016/0074/0074

INVENTOR: Kuliyev, A. M. O.; Alizade, Z. A. O.

ORG: none

TITLE: Preparative method for an antiwear additive to lubricating oils. Class 23, No. 184999 [announced by Institute of Petrochemical Processes AN AzerbSSR (Institut neftekhimicheskikh protsessov AN AzerbSSR)]

SOURCE: Izobreteniya, promyshlennyya obraztsy, tovarnyye znaki, no. 16, 1966, 74

TOPIC TAGS: antiwear additive, lubricant additive

ABSTRACT: An Author Certificate has been issued for a preparative method for an antiwear additive to lubricating oils, involving the treatment of alcohols with trichloro derivatives [unspecified] of trivalent phosphorus. To enhance the antiwear properties of the oils, a 3-chloro-1,2-propanediol ester is used as the alcohol. [SM]

SUB CODE: 11/ SUBM DATE: 12Apr65/ ATD PRESS: 5072

Card 1/1 fv

UDC: 621.892.84: 547.419.1.07

L 43 17-66 EWI(m)/EWP(1)/T/EWP(t)/ETI IJP(c) JD/WV/WB/DJ/RM

ACC R: AP6028572

(N)

SOURCE CODE: UR/0316/66/000/003/0017/0020

AUTHOR: Kuliyev, A. M.; Sardarova, S. A.; Agayev, N. M.

B42
4D

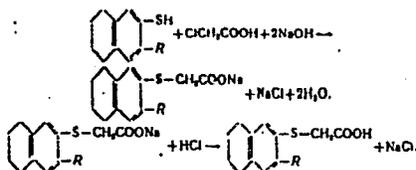
ORG: Institute of the Chemistry of Additives, AN AzerbSSR (Institut khimii prisadok AN AzerbSSR)

TITLE: Synthesis of [(alkyltetralyl)thio]acetic acids and study of their inhibition of steel corrosion

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 3, 1966, 17-20

TOPIC TAGS: ~~alkyltetralylthioacetic acid~~, synthesis, surface active substance, steel corrosion, corrosion inhibitor

ABSTRACT: Four (tetralylthio)acetic acids have been synthesized from the tetralinthiols and chloroacetic acid in the presence of alkalis:



L 43927-66

ACC NR: AP6028572

2

where R is H; C₃H₇; C₅H₁₁; C₆H₁₃. The inhibiting effect of the synthesized acids on the corrosion of ST-3 steel was studied at 20C in tests lasting up to 10 hr. The experiments were conducted in a stream of a mixture of petroleum and 3% aqueous sodium chloride solution (1/10 vol ratio) saturated with hydrogen sulfide; 50, 100 or 200 mg/l of the inhibitors were used. The acids were shown to slow down the corrosion rate of steel by 52% (when R is H) to 80.5% (when R is C₃H₇; C₅H₁₁; C₆H₁₃) and to reduce this rate in 10 hr tests from 5.9 to 2.8-1.2 g/m²·hr. Orig. art. has: 2 tables.

[B0]

SUB CODE: 07, 13/ SUBM DATE: 01Feb66/ ORIG REF: 004/ OTH REF: 002/ ATD PRESS:

5060

Card 212 *egp*

L 05002-67 EWT(m)/T DJ

ACC NR: AR6031161 (A,N) SOURCE CODE: UR/0081/66/000/015/P038/P038

AUTHOR: Kuliyev, A. M.; Abdullayev, A. G.; Zeynalova, G. A.

13
B

TITLE: Synthesis of pour point depressants^v by condensation of alkyl-phenols and alkyl-β-naphthols with formaldehyde

SOURCE: Ref. zh. Khimiya, Part II, Abs. 15P249

REF SOURCE: Uch. zap. Azerb. un-t. Ser. khim. n., no. 4, 1965, 47-52

TOPIC TAGS: pour point depressant, automotive oil

ABSTRACT: Pour point depressants have been synthesized by condensation of mono- or dicetyl derivatives of phenol and β-naphthol with formaldehyde. The products contained different numbers of aromatic rings linked by methylene groups. The effectiveness of the depressants was tested in automotive oils. It was shown that the condensation products depress the pour point of the oils more than the respective initial alkyl derivatives.

[BO]

SUB CODE: 11,07/SUBM DATE: none

Card 1/1 *llh*

L 06464-57 EWP(j)/EWT(m) RM/FDN

ACC NR: AP6029341

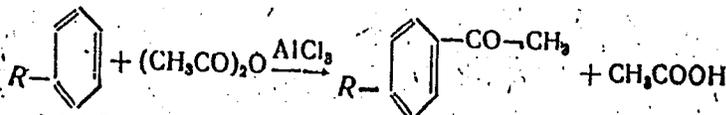
SOURCE CODE: UR/0316/66/070/002/0085/0090

AUTHOR: Kuliyev, A. M.; Farzajiyev, V. M.; Levshina, A. M.17
13ORG: Institute of Chemistry of Additives, AN AzerbSSR (Institut khimii prisadok AN AzerbSSR)TITLE: Synthesis of p-alkyl styrenes ¶

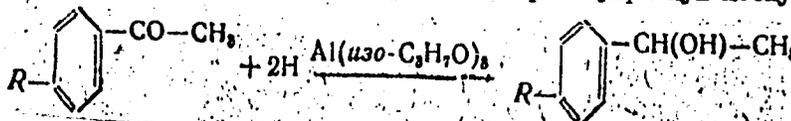
SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 2, 1966, 85-90

TOPIC TAGS: styrene, alkyl benzene, *CHEMICAL SYNTHESIS*

ABSTRACT: Alkyl styrenes with alkyl radicals from C₃ to C₁₀ located in the para position were synthesized from alkyl benzenes. Acetylation of the latter with acetic anhydride in the presence of AlCl₃ produced p-alkyl acetophenones



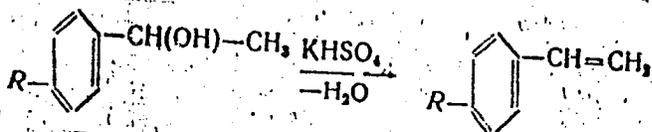
which were then reduced with aluminum isopropoxide to p-alkylphenyl methyl carbinols



Card 1/2

I 05464-67
ACC NR: AP6029341

Dehydration of the latter with potassium bisulfate under reduced pressure yielded the corresponding p-alkyl styrenes:



Orig. art. has: 3 tables.

SUB CODE: 07/ SUBM DATE: 03Jan66/ ORIG REF: 002/ OTH REF: 013

Card 2/2 NRE

L 10011-67 EWT(m) DJ
ACC NR: AP6036819

SOURCE CODE: UR/0316/66/000/004/0007/0009

28
26

AUTHOR: Kuliyev, A. M.; Alizade, Z. A.

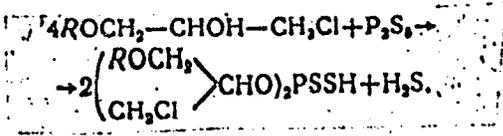
ORG: none

TITLE: Antiseizing and antiwear additives based on the products of the reaction of alkyl or aryl ethers of glycerol alpha-monochlorohydrin with phosphorus pentasulfide

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 4, 1966, 7-9

TOPIC TAGS: antiwear additive, antiseizing additive, zinc dithioate, ~~zinc dithioate~~, lubrication, lubricant, lubricating oil

ABSTRACT: Antiwear and antiseizing lubricating oil additives with four active elements in one molecule were synthesized by the ZnO neutralization of the chlorine-containing acid bis-2-(dialkoxy)-2-glyceryl dithioates. These dithioates were prepared by the reaction of alkyl or aryl ethers of alpha-monochlorohydrin with phosphorus pentasulfide:



L 10011-67

ACC NR: AP6036819

Eight derivatives were prepared in which R was a methyl, ethyl, n-propyl, n-butyl, n-amyl, n-hexyl, phenyl, or p-tolyl radical. All acid dithioates were thick yellow oils, readily soluble in organic solvents. Heating in a toluene solution with ZnO produced salts of the general composition:

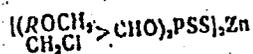


Table. 1. Results of Testing AK-15 Oil with Zinc Salts of Chlorine-Containing Dithioates

R	Concentration of the additive in:		Test results	
	g-mols	%	Generalized wear index	Corrosion, g/m ²
C ₂ H ₅	0,00194	1,56	85,8	4,05
n-C ₃ H ₇	.	1,67	89,5	3,85
n-C ₄ H ₉	.	1,78	84,5	2,35
n-C ₅ H ₁₁	.	1,89	98,4	1,10
n-C ₆ H ₁₃	.	2,00	110,8	0,50
n-CH ₂ C ₆ H ₄	.	2,00	90,2	0,65

Card 2/3

L 10011-67

ACC NR: AP6036819

2
These Zn-salts were tested as additive oil for antiwear and antiseizing properties. A 4-ball machine (GOST 9490-60) was used in the test. Anticorrosion properties were tested on a DK-2 device (NAMI) in the presence of 0.02% copper naphthenate used as the catalyst. The results are shown in Table 1. Orig. art. has: 3 tables.

SUB CODE: 07, 21/ SUBM DATE: 26Jan66/ ORIG REF: 003/ OTH REF: 002/ ATD PRESS: 5105

Card 3/3 *6/70*

L 10340-67 EWT(m) DJ

SOURCE CODE: UR/0413/66/000/015/0069/0069

ACC NR: AP6029504

(A)

INVENTORS: Kuliyev, A. M. O.; Levshina, A. M.; Mamedov, F. N. O.; El'ovich, I. I.;
Mushailov, A. Ye.; Farzaliyev, V. M. O. 40

ORG: none

TITLE: A method for obtaining a lubricating compound. Class '23, No. 184385
/announced by Institute of Petrochemical Processes, AN Azerbaidzhan SSR (Institut
neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR)/

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 69

TOPIC TAGS: polymer, lubricant, lubricant additive, transmission gear,
nonstructural mineral product

ABSTRACT: This Author Certificate presents a method for obtaining a lubricating
compound by thickening a mineral base with polymers and by adding a stabilizer. To
make this lubricating compound usable in gear transmissions, a mixture of high
viscosity and low viscosity components with a quaternary ammonium salt used as a
stabilizer is employed as the mineral base.

SUB CODE: 11/ SUBM DATE: 12Feb65

UPC: 621.892.8

Card 1/1 *mle*

KUZNETSOV, V.P.; RAGIMOV, Sh.S.; DZHAFAROV, R.D.; ALIYEV, A.M.; BAGIROVA, Z.A.;
AGA-ZADE, S.S.; MAMEDOV, I.F.; ALIYEVA, S.M.; KULIYEV, A.S.;
DEMIKHOVSKAYA, E.M.; SUBASHIYEVA, O.S.; AGALAROVA, A.B.;
SHAKHMALIYEVA, Sh.A.; MIRZOYEVA, G.I.; KASPAROV, V.A.

Caspian earthquake of January 27, 1963. Izv. AN SSSR. Ser. geofiz.
no.9:1392-1393 S '63. (MIRA 16:10)

1. Institut geologii AN AzerbSSR.

KULIEV, M. AL-ADDIN

Chem (2)

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

Alkylation of cyclononanes with olefins. Yu. G. Mamedaliev and Aladdin M. Kuliev. *Doklady Akad. Nauk S.S.S.R.* 88, 471-3(1953). Methylcyclohexane (I), b. 99-101°, contg. 95-8% of the pure substance, and C₁₁H₂₀ (II), b. 99.8-100.4°, d₄ 0.7039, n_D 1.4234, were alkylated with a gas mixt. from pyrolysis gas, contg.: C₂H₄ 1, C₃H₆ 0.5, MeCH=CH₂ 77, C₄H₈ 7, Me₂CH 1, butane 2.5, mixed butylenes 5.2, and higher hydrocarbons 5.8%. Passage of 17.7 l. of the gas mixt. into 66 g. I in the presence of 123.4 g. 98% H₂SO₄ at 33° over 3 hrs. gave 72 g. alkylate which on fractionation yielded unreacted I 65, methylisopropylcyclohexane 30, and higher products 15%. The main cut of the alkylate, b. 165-70°, corresponded to hexahydro-*p*-cymene and on refractionation b. 167.5-9.0°. This, dehydrogenated over Pt at 300-10°, gave cymene, indicating that no 1,1-substitution occurred. Oxidation of the product gave *p*-C₁₀H₁₆(CO₂H)₂. Thus the H on the tertiary C atom is not replaced. The work on II is not reported in this preliminary paper. G. M. Kosolapoff

GRIGORYAN, Kh.A.; KULIYEV, Al.M.; ALIYEV, Z.E.; PINSKER, B.A.

Investigating the drop in the adsorptive capacity of activated carbon as a result of the polymerization of hydrocarbons on its surface. Sbor.trud.AzNII NP no.2:325-345 Ag '58.

(MIRA 12:6)

(Carbon, Activated) (Hydrocarbons)

GRIGORYAN, Kh.A.; ALIYEV, Z.B.; KULIYEV, Al.M.

Separation of a propane-propylene mixture by means of
hypersorption. Azerb. neft. khoz. 37 no.7:37-38 J1 '58.
(MIRA 11:9)

(Propane) (Propene) (Sorption)

GRIGORYAN, Kh.A.; KULIYEV, Al.M.; PINSKER, B.A.

Drop in the adsorptive capacity of silica gel resulting from
polymerization of propylene on its surface. Azerb.neft.khoz.
37 no.10:33-35 0 '58. (MIRA 12:2)
(Silica) (Propene)

GRIGORYAN, Kh.A.; ALIYEV, Z.E.; KULIYEV, Al.M.

Investigation of the adsorption and separation properties of various
adsorbents with the help of hydrocarbon gases and their mixtures.
Sbor.trud Az NII NP no.4:229-250 '59. (MIRA 15:5)
(Adsorbents) (Hydrocarbons)

GRIGORYAN, Kh.A.; KULIYEV, Al.M.; ALIYEV, Z.E.; PINSKER, B.A.

Investigation of the process of separation of gases in the
fluidized bed of an adsorbent. Sbor.trud.Az NII NP no.4:251-271
'59. (MJRA 15:5)

(Gas—Separation)

15-8070

26877
S/C81/61/000/013/010/028
B110/B205

AUTHORS: Kuliyev, Al. M., Pinsker, B. A., Brovchenko, T. P.

TITLE: Decrease of the adsorptive capacity of activated carbon due to polymerization of acetylene on its surface

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 13, 1961, 510, abstract 13M139 (Azerb. khim. zh., 1960, no. 3, 31-35)

TEXT: Laboratory tests have shown that at a contact time between C_2H_2 and activated carbon of 25 sec and an operation time of 1-1.5 months, the activity of AP3 (ARZ) carbon is reduced by 10%, and that of CKT (SKT) carbon by 20-25%. The decrease in activity can be reduced by 50-60% if C_2H_2 and carbon are kept in contact only for 12 sec. [Abstracter's note: Complete translation.] X

Card 1/1

GRIGORYAN, Kh.A.; ALIYEV, Z.E.; KULIYEV, Al.M.; PINSKER, B.A.; AGAKISHIYEV, N.A.

Studying the free flow of granular materials from processing
apparatus. Azerb. neft. khoz. 39 no.6:35-38 Je '60.

(MIRA 13:10)

(Granular materials)

S/081/62/000/023/017/120
B156/B186

AUTHORS: Kuliyev, Al. M., Pinsker, B. A., Brovchenko, T. P.,
Agakishiyev, N. A.

TITLE: Adsorbing power of silica gel reduced by polymerization of
acetylene at its surface

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1962, 117, abstract
23B856 (Azerb. khim. zh., no. 6, 1961, 105 - 108 [summary in
Azerb.])

TEXT: The decrease in the adsorbing activity of silica gel resulting
from the polymerization of acetylene at its surface has been investigated.
It is proved that an adsorbent of consistent activity can be produced by
treating silica gel with HCl. [Abstracter's note: Complete translation.]

Card 1/1

KULIYEV, Al.M.; PINSKER, B.A.; AGAKISHIYEV, N.A.; GRIGORYAN, E.V.

Using silica gel as an adsorbent for separating saturated
and unsaturated hydrocarbons in refinery gases. Azerb.
neft. khoz. 40 no.1:36-37 Ja '61. (MIFA 14:8)

(Gases--Separation)
(Silica)

KULIYEV, A.I.M.; KOLYSHKIN, D.A.; LYUBCHENKO, N.G.; ALEKPEROV, G.Z.;
GRIGORYAN, E.V.; ABDULLAYEVA, S.M.

Studying the strength of highly activated coals. Azerb. neft.
khoz. 41 no.12:37-38 D '62. (MIRA 16:7)

(Coal--Testing)

(Gases--Absorption and adsorption)

KULIYEV, A.I.M.; TABATABAI, A.M.; SARKISOVA, L.G.

Topping of natural gas by the fluid adsorption method. Azerb.khim.zhur.
no.4:67-72 '63. (MIRA 17:2)

ACCESSION NR: AP4017571

S/0249/63/019/010/0025/0030

AUTHORS: Kulihev, Al. M.; Tabatabai, A. M.; Sarkisova, L. G.

TITLE: . Obtaining condensed gas in the boiling layer of an adsorbent

SOURCE: AN AzerbSSR. Doklady*, v. 19, no. 10, 1963, 25-30

TOPIC TAGS: low boiling alkanes, methane, ethane, propane, butane, pentane, gasoline, activated coal, sorption, desorption, rectification, extraction, enrichment, concentration

ABSTRACT: An experimental industrial process is described, permitting the separation of the C₂-C₄+ fraction from natural gas containing 93% methane, 3.5% ethane, 2.0% propane, 1.2% butane, and 0.3% pentane, and enriched with 30-100 gm/m³ of gasoline. The separation was achieved at an experimental industrial installation at the rates of 50 and 75 m³ per hour. The method used here had been described in an article entitled "Gasoline stripping of Natural Gas" [Abstracter's note: author not given]. The apparatus consists of a rectification column (with a continuous countercurrent-type flow) in which the gaseous hydrocarbon phase

Card 1/2

ACCESSION NR: AP4017571

moves upward, while activated charcoal of the SKLT-M type (granulated to 0.7-1.5mm) moves downward. The upper part of the column serves as an adsorber, and the lower part acts as a desorber in which the charcoal gives up the adsorbed gases under the direct impact of blown heated gas containing a "dynamic agent" of unspecified composition, admixed to the non-absorbed portion of the gas from the adsorber. This residual gas consists mainly of methane with nearly 40% ethane and some propane. With such an installation it was possible to recover from the original gas sample: 100% of the gasoline and butane, 77-100% of the propane, and 49-86% of the ethane. The ratio of 14.4 kg of charcoal per cubic meter of gas was the optimum (larger quantities of coal had an adverse effect on the yield). The optimum amount of the dynamic agent was about 6% of the volume of gas. Orig. art. has: 4 tables.

ASSOCIATION: Institut neftekhimicheskikh protsessov (Institute of Petrochemical Processes)

SUBMITTED: 12Jul63

DATE ACQ: 18Mar64

ENCL: 00

SUB CODE: GC

NO REF SOV: 000

OTHER: 000

Card 2/2

KULIYEV, Ali Musayevich, prof.; KREYN, S.E., prof., doktor tekhn.
nauk, red.; YENISHERLOVA, O.M., red.

[Lubrication oil additives; chemistry and technology] Pri-
sadki k smazochnym maslam; khimia i tekhnologiya. Moskva,
Khimia, 1964. 321 p. (MIRA 18:3)

KULIYEV, A.L.M.; TABATABAI, A.M.; ALEKPEROV, G.Z.; BUL'KANOV, R.B.

Use of metal-ceramic filters in a fluidized bed adsorption apparatus. Dokl. AN Azerb. SSR 19 no.8:31-35 '63. (MIRA 17:11)

1. Institut neftekhimicheskikh protsessov AN AzSSR. Predstavleno akademikom AN AzSSR M.F. Nagiyevym.

KULIYEV, A.L.M.; GRIGORYAN, E.V.; DAVLATOVA, S.M.

Study of silica gels with a higher adsorption capacity. Azerb.
khim. zhur. no.1:75-78 '65. (MIRA 18:7)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

KULIYEV, A.I.M.; GRIGORYAN, E.V.

Investigating the moisture capacity of silica gels. Izv. vys.
ucheb. zav.; neft' i gaz 8 no.1:28 '65.

(MIRA 18:2)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

KULIYEV, B.A., ispolnyayushchiy obyazannosti starshego nauchnogo sotrudnika

Osteosynthesis by means of a metal spike in fresh diaphyseal fractures of the leg. Azerb. med. zhur. no.8:46-49 Ag '61. (MIRA 15:2)

1. Iz Azerbaydzhanskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii (direktor - kand.med.nauk A.A. Ismailov). (TIBIA FRACTURE)

L 2516-66 EWT(m)/ETC/EWD(m)/EWP(t)/EWP(b) IJP(c) RJW/JD

ACCESSION NR: AP5014592

UR/0181/65/007/006/1860/1864

AUTHOR: Kuliyeu, B. B.; Abasov, B. A.; Khalilov, Kh. M.

TITLE: Effect of phosphorus impurity on the temperature-time dependence of the strength of selenium

SOURCE: Fizika tverdogo tela, v. 7, no. 6, 1965, 1860-1864

TOPIC TAGS: selenium, phosphorus, amorphous polymer, macromolecule, plastic strength

ABSTRACT: The authors continue an earlier investigation (FTT v. 7, 153, 1965) in which they showed that the general temperature-time relation for strength, applicable to various solids and derived by S. N. Zhurkov and his co-workers (FTT v. 4, 2184, 1962 and earlier papers) are applicable to amorphous selenium. The purpose of the present investigation was to determine the influence of phosphorus impurity on the coefficient of endurance, the magnitude of the energy barrier, and other physical characteristics determining the strength of selenium. The selenium investigated contained 0.2, 0.4, and 0.6% phosphorus by weight. The samples were drawn in the form of thin filaments (0.12 -- 0.30 mm thick) from the melt in a vacuum of the order of 10² mm Hg. The measurement method and the apparatus were

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ACCESSION NR: AP5014592

the same as described by the authors earlier. The results show that the general temperature-time strength dependence is valid not only for amorphous selenium in pure form, as in earlier investigation but also for phosphorus-doped selenium. It is shown further that the phosphorus atoms joined together the chains of the selenium micromolecules, thereby increasing the strength of the selenium. Orig. art. has: 5 figures, 2 formulas, and 1 table.

ASSOCIATION: Institut fiziki AN AzerbSSR, Baku (Institute of Physics AN Azerb SSR)

SUBMITTED: 04Dec64

ENCL: 00

SUB CODE: IC, TD

NR REF SOV: 008

OTHER: 001

Card 2/2

L 8947-66 EWT(1)/EWT(m)/EWP(w)/EEC(k)-2/EWG(m)/T/EWP(t)/EWP(k)/EWP(b)/EWA(m)-2/ETC
ACC NR: AP5022736 IJP(c) WG/RDW/JD SOURCE CODE: UR/0181/65/007/009/2847/2848

AUTHOR: ^{44, 55} Khalilov, Kh. M.; ^{44, 55} Kuliyeu, B. B. 55
B

ORG: ^{44, 55} Institute of Physics AN AzSSR, Baku (Institut fiziki AN AzSSR)

TITLE: Effect of temperature on the viscosity of selenium

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2847-2848

TOPIC TAGS: selenium, ^{21, 44, 55} solid viscosity, amorphous polymer, relaxation process

ABSTRACT: Viscosity was used as a basis for studying mechanical relaxation in selenium as a function of temperature. The coefficient of viscosity η was measured in filamentary specimens of selenium 0.20-0.32 mm thick. These data were used for determining the parameter

$$a_T = \frac{\eta_T}{\eta_{T_0}}$$

According to present theories on the viscoelastic properties of polymers, the parameter a_T determines the effect of temperature on the coefficient of friction. T_0 for amorphous selenium was taken as 80°C. A pattern similar to that of other vitrified polymer materials was observed when $\ln a_T$ was plotted as a function of $(T - T_0)$ for

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L 8817-46

ACC NR: AP5022736

amorphous selenium. Theoretical and experimental values for a_T show satisfactory agreement in the 30-100°C range. This parameter was used as a basis for calculating the apparent energy of activation of mechanical relaxation processes in amorphous selenium from 30 to 100°C. It was found that the activation energy increases as the vitrification point is approached. Orig. art. has: 1 figure, 1 formula.

SUB CODE: 20/

SUBM DATE: 13Mar65/

ORIG REF: 000/

OTH REF: 003

BVK

Card 2/2

KULIYEV, B. W.

KULIYEV, B. K. - "Railroad traumatism. Based on material from the surgical department of the Baku Railroad Hospital imenl 26 Baku Commissars ZKV Railroad, for 1931 through 1950". Baku, 1955. Azerbaydzhan State Medical Inst. (Dissertation for the degree of Candidate of Medical Sciences).

SO: Knizhnaya Letopis' No. 46, 12 November 1955. Moscow

ALI-ZADE, A. S.; KULIYEV, D. A.

Studies of some problems of thunderstorm phenomena conducted
at the Shemakha field laboratory. Izv. AN Azerb. SSR. Ser.
fiz.-mat i tekhn. nauk no.2:57-68 '62.

(MIRA 15:10)

(Azerbaijan—Thunderstorms)

ALIZADE, A.S.; KULIYEV, D.A.

Estimation of the charge density of a thundercloud by way of
simulation based on ground measurements of intensity variations
in an electric field. Izv. AN Azerb. SSR. Ser. fiz.-tekh. i mat.
nauk no.1:105-108 '64. (MIRA 17:9)

L 30406-66 EWT(1)/FCC GW

ACC NR: AP6010418

SOURCE CODE: UR/0423/66/000/001/0015/0018

50
B

AUTHOR: Alizade, A.S.; Kuliyev, D.A.; Khmyrov, V.A.

ORG: Azerbaydzhan Scientific-Research Power Engineering Institute im. I.G. Yos'man
(Azerbaydzhanskiy nauchno-Issledovatel'skiy institut energetiki)

TITLE: Investigation of the ¹²electrical structure of thunderclouds by the ¹²radiosonde method

SOURCE: Za tekhnicheskiy progress, no. 1, 1966, 15-18

TOPIC TAGS: ~~cloud formation~~, cloud physics, electric field, radiosonde, *ATMOSPHERIC ELECTRIC PHENOMENON, ATMOSPHERIC CLOUD, ATMOSPHERIC DISTURBANCE*

ABSTRACT: Scientific research has been intensified recently in the study of the electrical structure of thunderclouds. The greatest amount of results is provided by specially equipped aircraft, geophysical rockets, radiosonde methods, and radar. The first experiments on the utilization of radiosonde for the measurement of the intensity of the electrical field in thunderclouds were performed in 1948 - 1949 (Belin. Proc. P. Soc., 60, 340, 1948; Byers. Thund Elec., 1953). In 1955 large scale work was performed by V.I. Arabadzhi (Grozy i grozovyye protsessy. Belgosizdat, 1960). The highest electrical field intensity recorded in these investigations amounted to 200 v/cm, which agrees with the data

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UDC: 621.317.729.2: 551.576

L 30406-66
ACC NR: AP6010418

obtained earlier (100-300 v/cm) (Simpson a. Scrase-Proc. R. So., 161, 309. 1937), and which deviates somewhat from the corresponding results obtained by Gunn (Meter. 2, 2, 1954). The present authors express the hope that the application of radiosondes in future investigations will make it possible to accumulate the necessary data which can be used for a more rigid formulation of the electrical structure of thunderclouds. The authors study static method of processing measurement data in the presence of abrupt shifts of radio transmitter antennas. A discussion is given on the selection of the receiving equipment, the design characteristics of the receiving antenna, and the circuit of the radiosonde transmitter. The order in which the recordings should be made is discussed together with methods of data processing. In conclusion, the authors point out that the selection of the working frequency of the radiosonde transmitter was made on the basis of the "radio-communication regulations" issued in Geneva in 1959 and ratified by the Presidium of the Supreme Soviet of the Soviet Union on February 9 1961. Orig. art. has: 6 figures and 1 table. [06]

SUB CODE: 04 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 004 / ATD PRESS: 5017

Card 2/2 CC

L 4580-66 EWT(1)/FCC GW
ACCESSION NR: AP5020182

UR/0233/65/000/002/0105/0111

AUTHOR: Alizade, A. S.; Kuliye, D. A.

26
B

TITLE: Some results of an oscillographic method of investigating lightning in the field laboratory in Pirkula in 1963

SOURCE: AN AzerbSSR. Izvestiya. Seriya fiziko-tekhnikeskikh i matematicheskikh nauk, no. 2, 1965, 105-111

TOPIC TAGS: lightning, measuring apparatus, transmission line

ABSTRACT: The authors point out first that most data on the characteristics of lightning were not obtained under natural conditions, especially those in mountainous regions, and that realistic data are essential for the protection of structures such as power transmission lines. Consequently, they analyze the oscillograms showing the variation of the electric field intensity as measured with a horizontal antenna during a lightning stroke. The registration method, the apparatus, and the oscillogram interpretation were described in another paper (Izv. AN AzerbSSR, seriya fiz.-mat. i tekhn. nauk, 1962, 2). Oscillograms of 720 first discharges and 102 complete lightning discharges were obtained, of which 357 and 80, respectively, were analyzed. The number of pulses in the recorded discharges ranged 1 to 28, the average being approximately 6. The intervals between pulses ranged from 0.004 to 0.25 sec, the average being 0.025 sec. The duration of the total lightning ranged

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L 4580-66

ACCESSION NR: AP5020182

from 0.1 to 1.4 sec., the average being 0.4 sec. The front duration of the lightning pulse ranged from 0.4 to 27 μ sec, with average 3--4 μ sec. The lightning current ranged from 2 to 40 ka in most discharges. Less than 5% of the lightnings in the Azerbaydzhan area reach a current of 40 ka. The current variation ranges from 1 to 26 ka/ μ sec. A tendency of the current variation to become steeper with increasing current is noted but not confirmed. The results are compared with those obtained by other investigations. Orig. art. has: 6 figures and 1 formula.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NR REF SOV: 005

OTHER: 008

Card 2/2 *SP*

KULIYEV, D.K.

Some climatic characteristics of the specification of the
therapeutic effect on arthritics during naphthalan treatment
under health resort conditions. Sbor. trud. Azerb. nauch.,
issl. inst. kur. i fiz. metod. lech. no.9:98-107 '63.
(MIRA 18:8)

KULIYEV, D.M.

Spectrophotometric investigation of strong Fraunhofer lines
in the spectrum of the sun's disk center and edge. Astron.tsir.
no.227:10-13 F '62. (MIRA 16:1)

1. Astronomicheskaya observatoriya Leningradskogo gosudarstvennogo
universiteta.

(Spectrum, Solar)

L 13117-63
Pi-4/Pq-4

REC (ENT 3) / PDC (w) / EEC-2 / ES (v)

APPTC (END-3) Pe-4/
3, 43, 45, 207, 302, 303, 308

69

AUTHOR: Kuliyev, D. M.

TITLE: Concerning the central intensities of strong Fraunhofer lines in the solar spectrum γ

PERIODICAL: Leningrad, Universitet. Vestnik, no. 7, Seriya matematiki, mekhaniki i astronomii, no. 2, 155-160

TEXT: The author measures the central intensities, r of certain strong Fraunhofer lines in the spectrum of the center and of the limb of the solar disk, and shows that the relation discovered by O. Melnikov ($r_{v_0} \sim \lambda$) is true for strong absorption lines (O. A. Mel'nikov, Vestnik IGU, no. 19, 100, 1960, Solnechnye dannyye no. 9, 89, 1959).

SUBMITTED: September 7, 1962

Card 1/1

KULIYEV, D.M.

Solar spectrum. Priroda 52 no.8;31-37 Ag '63. (MIRA 16:9)

1. Astronomicheskaya observatoriya Leningradskogo gosudarstvennogo universiteta.

(Spectrum, Solar)

ZUL', N.M., kand. tekhn. nauk; KULIYEV, F.A., inzh.

Operational reliability of automatic relay systems of electrical power distribution networks. Elektrichestvo no.9:40-44 S '65.

(MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrifikatsii sel'skogo khozyaystva.

KULINEV, F.Sh.

Intraosseous administration of streptomycin in treating osteo-
articular tuberculosis. Vest. khir. 93 no.11:100-103 N '64.

(MIRA 18:6)

1. Iz kostno-khirurgicheskogo otdeleniya (zav. - kand. med. nauk
N.N. Bunyatov) Respublikanskogo nauchno-issledovatel'skogo insti-
tuta tuberkuleza AzerbSSR.

KULIYEV, F. Sh.

Determination of streptomycin concentration in various
tissues after intraosseous and intramuscular administration.
Azerb. med. zhur. 41 no. 10:28-33 0 '64 (MIRA 19: 1)

GADSHIYEV, K.Sh., kand.veterinarnykh nauk; KULIYEV, G.A., veterinarnyy vrach

Hoof diseases in cattle. Veterinariia 38 no.1:54-55 Ja '61.

(MIRA 15:4)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy veterinarnyy institut.
(Hoof--Diseases) (Azerbaijan--Cattle--Diseases and pests)

KULIYEV, F.T.

Seismic microregionalization of the Apsheron Peninsula. Izv.
AN Azerb. SSR. Ser. geol.-geog. nauk i nefti no.6:105-114
'62. (MIRA 16:4)

(Apsheron Peninsula—Seismology)

KULIYEV, F. T.

Seismic microzoning of the Apsheron Peninsula. Trudy Inst. fiz.
Zem. no.22. Vop. inzh. seism. no.7:76-80 '62.
(MIRA 15:10)

(Apsheron Peninsula--Seismology)

KULIYEV, F.T.

Seismicity of the Apsheron Peninsula. Izv. AN Azerb. SSR Ser.
geol.-geog. nauk i nefti no.1:55-65 '63. (MIRA 16:6)

(Apsheron Peninsula--Seismology)

L 24835-66 EWT(1)/EWA(h) GW
ACC NR: AT6007202

SOURCE CODE: UR/2619/65/000/036/0115/0118

AUTHOR: Kuliyev, F. T.

37
B+1

ORG: Institute of Physics of the Earth, Academy of Sciences, SSSR (Institut fiziki Zemli Akademii nauk SSSR)

TITLE: Selecting a reference soil for microzoning the Apsheronkiy Peninsula

SOURCE: AN SSSR. Institut fiziki Zemli. Trudy, no. 36 (203), 1965. Seysmicheskoye mikrorayonirovaniye; voprosy inzhenernoy seysmologii (Seismic microdistricting; problems of engineering seismology), no. 10, 115-118

TOPIC TAGS: earthquake, seismology, soil mechanics

ABSTRACT: It is necessary in instrumental seismic microzoning of any region to select a reference soil from analysis of geological engineering data with a given initial intensity assigned from the seismic zoning map of the Soviet Union. The reference soil selected for the Apsheronkiy Peninsula was argillaceous sand of the Quaternary period (of 10 meters or more in thickness) with a subsurface water level of 8 meters or more. This type of soil was chosen for the excellent reason that it

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L 24835-66

ACC NR: AT6007202

underlies nearly the entire heavily populated (eastern) section of the Peninsula. Analysis of macroseismic data for 1830-1963 shows that this type of soil vibrates during earthquakes with an intensity of at least 7 points. Graphs for earthquake recurrence on the Apsheronkiy Peninsula were used for determining the seismic activity of the zone covered by the reference soil. It was found that a single seven-point earthquake takes place once in 14 years on the Peninsula. An eight-point earthquake takes place on the average every 55 years (on an area of 1000 km²). The eight-point quakes cover 500 km², while seven-point quakes cover an area of 900 km². Seismic zoning of the Peninsula is discussed. Orig. art. has: 2 figures.

SUB CODE: 08/ SUBM DATE: 00/ ORIG REF: 010/ OTH REF: 000

Card 2/2dd

BELIBEKOV, A.A.; AMIROV, A.D.; KOZLOV, V.S.; KULIYEV, G.A., redaktor;
GONCHAROV, I.A., tekhnicheskiiy redaktor

[Underground repair of oil wells] Podzemnyi remont neftianyykh
skvazhin. Baku, Gos nauchno-tekhn. izd-vo neftianoi i gorno-
toplivnoi lit-ry Azerbaidzhanskoe otd-nie, 1954. 393 p. (MLRA 9:8)
(Oil wells--Equipment and supplies--Repairing)

Ku L. yev, B.

COUNTRY : USSR

CATEGORY : General and Specialized Zoology. Insects. General Zoology and Entomology.

NO. : ZHURNAL, No. 11 1958, No. 111116

AUTHOR : Kuliyev, B.

INST. : Academy of Sciences, AzerbSSR

TITLE : Aphidies of the genus *Trialeurodes* as pests of plants in the greenhouses of Azerbaijan

TRIN. ENR. : Kuliyev, B. Zhurn. Akademiya Nauk AzerbSSR, No. 11, 1958, No. 111116

ABSTRACT : Aphidies (tentatively identified as *Trialeurodes*) were discovered on the greenhouses of the botanical garden of the Academy of Sciences on *Santalia caryophylli* and on decorative plants, and were also studied on *Fuchsia*. On the lower parts of the tomato plant were 12-13 aphid larvae and aphidies, on the upper parts of the plant larvae and aphidies. The aphidies were heavily infested. The aphidies in the greenhouses of the garden, 17 larvae, the 112 aphidies per leaf. The life cycle of the aphid is related to its development. The aphidies (species composition) not yet determined.

CARD: 1/2

KULIYEV, G. A. Cand Biol Sci -- (diss) ^{Species} ~~The~~ Whiteflies (Homoptera, Aleurodoidea) of Azerbaydzhan (^{distribution} ~~Composition, of the species, prevalence,~~ and biology of the most important species)." Baku, Publishing House of ^{the} Acad Sci AzSSR, 1959. 18 pp (Min of Higher Education USSR. Azerbaydzhah State Univ im S. M. Kirov), 150 copies (KL, 44-59, 126)